



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,572	03/31/2004	Albert H. Mitchell JR.	CIS0215US	6923
33031 7590 07/31/2007 CAMPBELL STEPHENSON LLP 11401 CENTURY OAKS TERRACE BLDG. H, SUITE 250 AUSTIN, TX 78758			EXAMINER MERED, HABTE	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 07/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,572

Applicant(s)

MITCHELL ET AL.

Examiner

Habte Mered

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08-30-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to communication filed on 3/31/2004.
2. Claims 1-40 are pending. Claims 1, 15, 25, 35, and 38 are the base independent claims.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 1-40** are rejected under 35 U.S.C. 102(e) as being anticipated by Saksio (US 2004/0105390).

Saksio like the Applicant's invention teaches method and system for implementing a fast recovery process in a network.

2. Regarding **claims 1 and 25**, Saksio discloses a method comprising: detecting a failure (**Figure 1, Failure 2**) of a first link (**Figure 1, LSW7**) between a network element (**Figure 1, LAN-Switch SW7**) and an upstream portion of a communications network (**towards R1 and R2 is upstream direction where as towards Host1...9 is downstream --- See paragraph 27**); disabling a second link (**Figure 1, LSW 1**) between the network element (**Figure 1, LAN-Switch SW7**) and a downstream portion of the communications network (**See paragraph 28**) to maintain a communications channel between the downstream portion of the communications network and the upstream portion of the communications network in response to the detecting (**when**

the failure is detected the Host 1 switches the active $L1_1$ to the stand-by link $L1_2$ see paragraph 26)

3. Regarding **claim 15**, Saksio discloses an apparatus (**See Figure 1**) comprising: means for detecting a failure (**Figure 1, Failure 2**) of a first link (**Figure 1, LSW7**) between a network element (**Figure 1, LAN-Switch SW7**) and an upstream portion of a communication network (**towards R1 and R2 is upstream direction where as towards Host1...9 is downstream --- See paragraph 27**); means for disabling a second link (**Figure 1, LSW 1**) between the network element (**Figure 1, LAN-Switch SW7**) and a downstream portion of the communications network (**See paragraph 28**) to maintain a communications channel between the downstream portion of the communications network and the upstream portion of the communications network in response to the failure. (**when the failure is detected the Host 1 switches the active $L1_1$ to the stand-by link $L1_2$ see paragraph 26**)

4. Regarding **claims 2, 16, and 26**, Saksio discloses a method wherein the downstream portion of the communications network comprises a redundantly linked network element. (**See Figure 1, Hosts 1...9 is multi-homed with active and stand-by links**)

5. Regarding **claims 3, 17, and 27**, Saksio discloses a method wherein the redundantly-linked network element comprises a protocol stack including a first protocol stack layer and a second protocol stack layer, the first protocol stack layer is associated with one or more applications, and the disabling comprises notifying the second protocol stack layer of the failure. (**See Figures 2a and 2b**)

6. Regarding **claims 4, 18, and 28**, Saksio discloses a method wherein the network element comprises a primary network element (**Figure 1, LAN-SW1**), the method further comprises enabling a third link between the redundantly-linked network element (**Figure 1, Host 1**) and a secondary network element (**Figure 1, LAN-SW2**), and the secondary network element is coupled to the upstream portion of the communications network using a fourth link (**Figure 1, LSW2**). (**See also paragraphs 26-29**)

7. Regarding **claims 5, 19, and 29**, Saksio discloses a method wherein the redundantly linked network element comprises a multi-homed endstation. (**See Figure 1, all Hosts are indeed multi-homed endstation**)

8. Regarding **claim 6**, Saksio discloses a method wherein the network element comprises a data link layer network element. (**See Paragraphs 6 and 18**)

9. Regarding **claim 7**, Saksio discloses a method wherein the data link layer network element comprises an Ethernet switch. (**See Figures 1 and 2a – the LAN Switch is an Ethernet switch**)

10. Regarding **claim 8**, Saksio discloses a method wherein the upstream portion of the communications network comprises a network layer network element. (**Figure 1 – R1 and R2 are routers and are network layer network elements**)

11. Regarding **claim 9**, Saksio discloses a method wherein the disabling comprises: disabling a plurality of links between the network element and a plurality of redundantly-linked network elements. (**Due to Failure 2 links LSW1, LSW3 and LSW4 are disabled – see paragraph 28**)

12. Regarding **claims 10, 20, and 30**, Saksio discloses a method wherein the disabling comprises: disabling a link of a plurality of links between the network element and a plurality of redundantly-linked network elements. **(Due to Failure 2 links LSW1, LSW3 and LSW4 are disabled – see paragraph 28)**

13. Regarding **claims 11, 21, and 31**, Saksio discloses a method wherein the disabling the link of the plurality of links comprises: disabling a link associated with a virtual network. **(Even though it is not clear what the Applicant is referring to as a virtual network, the routers R1 and R2 can be connected to an ATM network forming a switched or permanent virtual connection)**

14. Regarding **claims 12, 22, and 32**, Saksio discloses a method wherein the disabling the link of the plurality of links comprises: disabling a link associated with a port of the network element. **(See Figure 2a&b – the ports are associated with the links)**

15. Regarding **claims 13, 23, and 33**, Saksio discloses a method wherein the disabling comprises: disabling the second link between the network element and the downstream portion of the communications network within a period of time substantially less than or equal to 50 milliseconds of the detecting. **(See Paragraphs 14 and 16)**

16. Regarding **claims 14, 24, and 34**, Saksio discloses a method wherein the disabling comprises: disabling the second link between said network element and said downstream portion of the communications network within a period of time substantially less than or equal to 2 seconds of the detecting. **(See Paragraphs 14 and**

16 and given that Saksio teaches the same method the same performance has to be produced)

17. Regarding **claims 35**, Saksio discloses a data processing system comprising: a redundantly-linked endstation (**See Hosts 1...9 which is multi-homed**); and a network element (**Figure 1, LSW7**) configured to detect a failure of a first link (**Figure 1, LSW7**) between the network element and an upstream portion of a communications network (**towards R1 and R2 is upstream direction where as towards Host1...9 is downstream --- See paragraph 27**), and disable a second link (**Figure 1, LSW1**) between the network element and the redundantly-linked endstation to maintain a communications channel between the redundantly-linked endstation and the upstream portion of the communications network in response to the failure. (**See Paragraphs 26, 27, and 28**)

18. Regarding **claims 36**, Saksio discloses a data processing system wherein the network element comprises a primary network element (**Figure 1, LAN-SW1**), the redundantly-linked endstation (**Host 1**) is configured to enable a third link (**Figure 1, L1₂**) between the redundantly-linked endstation and a secondary network element (**Figure 1, LAN-SW2**), and the secondary network element is coupled to the upstream portion of the communications network using a fourth link (**Figure 1, LAN-SW2**).

19. Regarding **claims 37**, Saksio discloses a data processing system wherein the network element comprises an Ethernet switch. (**See Figure 2a and all the LAN switches in Figure 1 are Ethernet switches**)

20. Regarding **claim 38**, Saksio discloses a data processing system comprising:
a redundantly-linked endstation (**See Hosts 1...9 which is multi-homed**);
a primary network element (**Figure 1, LAN-SW1**), wherein the primary network element is coupled to an upstream portion of a communications network using a first link (**Figure 1, LSW1**), the primary network element is coupled to the redundantly-linked endstation using a second link (**Figure 1, L1₁**) and the primary network element is configured to detect a failure of the first link (**Figure 1, Failure 1**), and disable the second link to maintain a communications channel between the redundantly-linked endstation and the upstream portion of the communications network in response to the failure (**See paragraphs 26 and 27**); and a secondary network element (**Figure 1, LAN-SW2**), wherein the secondary network element is coupled to the redundantly-linked endstation using a third link (**Figure 1, L1₂**). (**See Paragraphs 26, 27, and 28**)
21. Regarding **claim 39**, Saksio discloses a data processing system, wherein the redundantly-linked endstation (**Figure 1, Host 1**) is configured to enable the third link (**Figure 1, L1₂**), and the secondary network element (**Figure 1, LAN-SW2**) is coupled to the upstream portion of the communication network using a fourth link (**Figure 1, LSW2**)
22. Regarding **claims 40**, Saksio discloses a data processing system wherein the primary network element comprises an Ethernet switch. (**See Figure 2a and all the LAN switches in Figure 1 are Ethernet switches**)

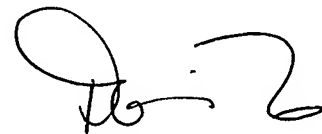
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on 571 272 7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HM
07-22-2007



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600